

August 27, 2021

Mr. David Albright
Manager, Groundwater Protection Section
USEPA Region 9 (WTR-4-2)
75 Hawthorne St
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1
Monthly Update for AL/AQL Exceedances at Supplemental Monitoring Well M59-O

Dear Mr. Albright:

Florence Copper is providing this monthly update of supplemental monitoring well M59-O alert level (AL) and/or Aquifer Quality Limit (AQL) exceedances under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit).

Florence Copper has been voluntarily monitoring M59-O monthly for the parameters listed in Table 1 (see attached), and previously submitted a monthly report on July 20, 2021. Table 1 has been updated to include the most recent laboratory results from the monthly sample collected on July 19, 2021. The August monthly sample was taken on the 24th, and the results are pending.

The BHP Copper Evaporation Pond was put into service on July 8, 2021. Operation of this Pond increases Florence Copper's capacity to store and evaporate neutralized solutions and enables significantly higher recovery rates in the wellfield. The higher recovery rates, and other adjustments to flows in the wellfield, should advance rinsing activities, and mitigate the exceedances.

In addition to establishing higher recovery rates in the wellfield, Florence Copper has installed and is operating a submersible pump in M59-O and in observation well O-03, and continues to pump observation well O-02 while maintaining inward hydraulic gradients at all well pairs. Also, injection was discontinued in well I-02 in order to aid recovery efforts in this area of the wellfield.

Florence Copper will continue monthly sampling of supplemental monitoring well M59-O for parameters which exceeded the ALs and AQLs, and will report these results monthly to EPA until all concentrations are below the ALs and AQLs.

Please feel free to contact me should you have any questions or comments.

Sincerely,
Florence Copper, Inc.

A handwritten signature in dark ink, appearing to read 'Brent Berg', with a long, sweeping horizontal stroke extending to the right.

Brent Berg
General Manager

Cc: Nancy Rumrill, EPA Region 9
Maribeth Greenslade, ADEQ

Table 1. M59-O Monthly Sampling Results

Parameter	AL	AQL	12/28/20	1/18/21	2/22/21	3/23/21	4/14/21	5/19/21	6/01/21	7/19/2021
Magnesium (mg/L)	23	--	57.2	63.1	26.5	19.1	19.8	65.6	59.8	70
Sulfate (mg/L)	202	--	865	960	383	228	249	999	850	1200
Total dissolved solids (TDS) (mg/L)	854	--	1,860	1800	970	762	780	2010	1900	2300
Total Uranium (mg/L)	0.0052	--	0.037	0.038	0.0088	0.003	0.0038	0.0096	0.0117	0.0187
Adjusted gross alpha (pCi/L)	15.8	15.8	73.5 ± 3.7	35.4 ± 2.5	17.9±1.4	18.8±1.5	18.1±1.2	49.1±2.1	57.3±2.9	29.4±3.2
Radium 226+228 (pCi/L)	6.9	6.9	19.8 ± 0.8	22.0 ± 0.8	6.2±0.5	7.0±0.6	10.9±0.7	18.0±0.8	13.6±0.7	15.4±0.7
Gross beta (pCi/L)	16	16	43.2±2.7	52.7±3.0	NA	NA	19.6±1.9	52.1 +/- 3.3	36.9±2.9	41.6±3.2

BOLD values are exceedances of AL and/or AQL

NA: not analyzed